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John Edward Schoen

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BAIRD, EDWARD J

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/532,968	<b>Applicant(s)</b> SCHOEN ET AL.	
	<b>Examiner</b> Ed Baird	<b>Art Unit</b> 3695	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **20 October 2010** has been entered.

### ***Status of Claims***

2. Applicant has amended claims **1, 14, 23 and 32**. No claims have been added or canceled. Claim 44 had been canceled prior to last office action. Thus, claims 1-43 remain pending and are presented for examination.

### ***Response to Arguments***

3. Applicant's remarks/ arguments filed **20 October 2010** have been fully considered but are moot in view of the new ground(s) of rejection.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have

Art Unit: 3695

been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. **Claim 1** is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. **12/858,741**. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim 1 in the instant application and claim **1** of the copending recite: notifying potential participants of an auction time; receiving from participants orders related to the auction; receiving from participants credit limits for execution of orders input by the participants with other participants; conducting the auction at the time notified to the participants by matching the orders received; notifying the owners of matched orders; and notifying the participants of credit allocated to the auction but not used in matched orders. Claim 1 of the copending application is an obvious variation of claim 1 of the instant application because claim 1 of the instant application recites *a method of trading fungible goods on a system of one or more computers*.

Art Unit: 3695

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 32-43 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

8. **Claims 32-43** are computer-readable media and, based on the broadest reasonable interpretation, include both tangible and transitory media. Transitory embodiments are not directed to statutory subject matter. See *In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007). Thus, to qualify as § 101 statutory, the claim language should clearly indicate non-transitory tangible media. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Regarding claims **1, 14, 23 and 32**, in exemplary limitations:

- one or more computers of the system notifying potential participants of an auction time;

Art Unit: 3695

- one or more computers of the system receiving from participants orders related to the auction;
- one or more computers of the system receiving from participants credit limits for execution of orders input by the participants with other participants;

It is not clear whether the “potential participants” are the same as participants whose orders are related to the auction or participants whose credit limits are input. It is also not clear who “other participants” are – i.e. potential participants, participants whose orders are related to the auction, or participants whose credit limits are input. It is believed the Applicant means the second and third limitation should read:

- one or more computers of the system receiving from the participants orders related to the auction;
- one or more computers of the system receiving from the participants credit limits for execution of orders input by the participants ~~with other participants~~;

For purposes of examination, the limitations will be interpreted accordingly.

Appropriate correction is required. Participants, potential participants, et al should be specified accordingly throughout claim language.

12. Regarding claims **1, 14, 23 and 32**, in the exemplary limitations:

- one or more computers of the system notifying potential participants of an auction time;
- one or more computers of the system conducting the auction at the time notified to the participants by matching the orders received;

It is not clear if the auction takes place at the “auction time” (former limitation) or when the participants are notified (of an auction time).

13. Regarding **claims 1, 14, 23 and 32**, in exemplary limitations:

Art Unit: 3695

- one or more computers of the system conducting the auction at the time notified to the participants by matching the orders received;
- one or more computers of the system notifying, after completion of the auction, the owners of matched orders matched during the auction;

it is not clear *at what step* the auction is complete. There is also insufficient antecedent basis for “the owners of matched orders” in that *the owners* of matched orders are not defined in one of the previous steps.

14. Regarding **claims 1, 14, 23 and 32**, in exemplary limitations:

- one or more computers of the system notifying, after completion of the auction, the owners of orders matched during the auction; and
- one or more computers of the system notifying the participants of auction-specific credit that was allocated to the auction but which was not used in matching orders during the auction.

it is not clear *at what step* auction-specific credit was allocated to the auction. It is not clear which participants are notified of auction-specific credit that was allocated – i.e. each participant is notified of their own auction-specific credit that was allocated, or each participant is notified of all the auction-specific credit that was allocated but which was not used in matching orders during the auction. It is not clear whether “matching orders during the auction” in the latter limitation means “matching the orders during the auction” referring to “orders matched during the auction” in the former limitation, or other matching orders.

Claim language should be amended to make these clarifications. Appropriate correction is required.

15. **Claim 32** is a computer-readable medium. It is not clear whether the computer-readable medium is a tangible or transitory medium. Claim language should be amended to make this clarification. Appropriate correction is required.

Art Unit: 3695

16. Regarding **claim 32**, in the limitation:

- notifying the participants of auction-specific credit that was allocated to the auction but which was not used in orders during the auction.

it is not clear "*orders during the auction*" refers to - i.e. orders matched during the auction, received orders, or orders input by the participants. Claim language should be amended to make this clarification. Appropriate correction is required.

17. **Claims 2-13, 15-22, 24-31 and 33-43** are rejected by way of dependency on a rejected independent claim.

18. **Claim 23** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are between auction administrator, trader terminals, a store, a matching engine, a deal notifier, and a credit notifier. To overcome this rejection, the components must indicate a structural relationship between them.

19. **Claims 24-31** are rejected by way of dependency on a rejected independent claim.

### ***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



Art Unit: 3695

21. Claims 1-8, 14-21, 23-29, and 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Buist et al** (US Pub. No. 2002/0035534) in view of **Silverman et al** (US Patent No. 5,136,501) in further view of **Kitchen et al** (US Pub. No. 2003/0018561).

22. Regarding **claims 1, 14, 23 and 32**, **Buist** discloses a system and method for conducting an on-line auction of securities [0009]. He discloses receiving orders and maintaining order books over a computer network [0024 and claim 2]. **Buist** teaches:

- one or more computers of the system notifying potential participants of an auction time - *see at least* [0011], [0052], [0061], and [Figure 2];
- one or more computers of the system receiving from participants orders related to the auction - *see at least* [0053]-[0056] and [Figure 2];
- one or more computers of the system conducting the auction at the said time by matching the orders received - *see at least* [0053] and [0057];
- notifying the owners of matched orders - *see at least* [0012] and [0047].

Examiner note that *allocating units of a security* is indicative of Applicant's *notification of matched orders*;

**Buist** does not explicitly disclose:

- one or more computers of the system receiving from participants *credit limits* for execution of orders input by the participants with other participants;
- one or more computers of the system notifying, after completion of the auction, the owners of orders matched during the auction.

However, **Silverman** teaches a matching system for trading instruments in which bids are automatically matched against offers for the given trading instruments [column 3 lines 18-27]. Real time prices are subject to *real time credit controls* to anonymously block or inhibit the completion of potential matching transactions which do not satisfy an anonymous gross counterparty credit limit [Id.]. He discloses a host computer

Art Unit: 3695

anonymously matching active bids and offers in the system based on variable matching criteria including the gross counterparty credit limit between counterparties to a potential matching transaction, price, and available quantity [column 3 lines 39-43]. Both the transaction originating keystation and the counterparty keystation for the potential matching transaction each *have an associated counterparty credit limit*, with the system blocking or inhibiting completion of the potential matching transaction between the transaction originating keystation and the counterparty keystation when the potential matching transaction has an associated value in excess of the counterparty credit limit [column 3 lines 52-60]. Examiner notes *keystations having associated counterparties' credit limit* is indicative of Applicant's *receiving credit limits from participants*.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to modify **Buist's** disclosure to include *keystations having associated counterparties' credit limit* as taught by **Silverman** in order to anonymously block or inhibit the completion of potential matching transactions which do not satisfy a counterparty credit limit - **Silverman** [column 3 line 23-27].

Neither **Buist** nor **Silverman** explicitly discloses:

- one or more computers of the system notifying the participants of auction-specific credit that was allocated to the auction but which was not used in matching orders during the auction.

However, **Kitchen** teaches a method, apparatus, software and system for a party to buy and sell goods and services over a computer network where one may effectively establish a market in a product by determining the price at which one is willing to buy or sell a good or service [0014]. She further discloses establishing a credit limit for a Counterparty and monitoring the Counterparty's remaining credit as transactions with the Party are executed [0018]. She discloses a means for determining the Party's credit

Art Unit: 3695

exposure on a proposed transaction, monitoring the Party's overall credit exposure to a particular counterparty, and failing to complete transactions that would result in a counterparty exceeding their available credit with the Party [0131]. Examiner interprets *monitoring the Party's overall credit exposure to a particular counterparty* as indicative of Applicant's *notifying the participants or auction-specific credit*.

Further, she discloses the amount of available credit being determined by comparing a Party's aggregate credit exposure to the Counterparty, assuming completion of the transaction that has been offered, to the Counterparty's credit limit that has been established by the Party [0132]. A Counterparty's credit exposure is preferably updated at the end of each trading session and new credit limits are established for the next trading session [Id.]. Examiner notes that *establishing new credit limits* is indicative of Applicant's *notifying participants of auction-specific credit which was allocated but not used*.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to modify **Buist's** disclosure to include *updating credit limits at the end of each trading session* taught by **Kitchen** in order to properly monitor credit exposure to a particular Counterparty and to avoid incurring excessive credit exposure - **Kitchen** [00132].

23. Regarding **claims 2 and 15**, **Silverman** teaches orders which are matched on the basis of credit and price - see *at least* [column 7 lines 13-15].

24. Regarding **claim 3 and 33**, **Buist** teaches orders receiving less than a predetermined time before the auction as not being accepted - see *at least* [0012].

25. Regarding **claim 4 and 34**, **Silverman** teaches credit limit allocations received less than a predetermined time before the auction are not accepted by the system - see *at least* [column 3 lines 18-27] and [column 19 lines 36-44].

Art Unit: 3695

26. Regarding **claim 5, 6, 20, 21, 28, 29, 35 and 36**, **Silverman** teaches participants being notified of unused credit *immediately* or *within one minute* after the auction is completed - see *at least* [column 19 lines 33-68]. Examiner notes that *real time credit* is indicative of Applicant's *immediately* or *within one minute* after auction completion.

27. Regarding **claims 7, 16, 25 and 37**, **Buist** teaches notifying participants of one or more instruments to be auctioned and the minimum order amount [0052]. Examiner notes that *minimum prices* are indicative of Applicant's **minimum order amount**. Also, **Buist** discloses the *market manager* - see *at least* [0018]-[0022] and *market administrator* - see *at least* [0018]-[0027] which have analogous functions of Applicant's *system administrator* (claim 16), and *auction administrator* (claim 25).

28. Regarding **claims 8, 17, 26 and 38**, **Silverman** teaches automatically renewing a participants credit limits for future auctions on request from that participant - see *at least* [column 3 line 60-column 4 line 5]. Examiner notes that *resetting trading credit party limits* as inclusive of Applicant's *automatically renewing a participants credit limits*.

29. Regarding **claims 18 and 24**, **Silverman** teaches notification of matched order messages being sent to a participant deal feed client via a deal feed server - see *at least* [column 8 lines 31-58] and [Figure 2]. Examiner interprets *ticker* as analogous to Applicant's **deal feed server**.

30. Regarding **claims 19 and 27**, **Silverman** teaches submitting **limit orders** [column 20 lines 58-67].

31. Claims 9-13 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Buist** in view of **Silverman** in further view of **Kitchen** and in further view of **Wilton et al** (US Patent No. 6,519,574).

Art Unit: 3695

32. Regarding **claim 9-11 and 39-41**, neither **Buist, Silverman** nor **Kitchen** explicitly discloses:

- receiving from participants credit limits for use in matching orders between other participants lacking bilateral credit.
- receiving from participants an identification of other participants whose credit limits may be used to match orders entered by the participants.
- matching orders received from participants who do not have bilateral credit, using the credit of an intermediary having bilateral credit with the participants submitting the matched order.

However, **Wilton** teaches *an electronic trading system which automatically identifies arbitrage opportunities arising from price anomalies that arise due to credit discrepancies within a market* [column 2 lines 45-49]. He further discloses *an electronic trading system which is capable of performing an automatic, instantaneous name switch operation whereby a less credit-worthy trading entity uses the credit lines of a more credit-worthy trading entity to execute a desired transaction which would not be otherwise available to the less credit-worthy trading entity due to lack of bilateral credit availability* [column 2 lines 57-64]. He discloses *credit entities* which may extend individual credit limits to different branches of a financial institution [column 5 lines 13-29]. Examiner interprets such *credit entities* as analogous to Applicant's *intermediary having bilateral credit* with the participants submitting the matched order.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to modify **Silverman's** disclosure to include *using credit entities to provide credit to participants lacking bilateral credit* as taught by **Wilton** because they allow less credit-worthy trading entities to use the credit lines of more credit-worthy trading entities to execute desired transactions [**Wilton** column 2 lines 57-64].

Art Unit: 3695

33. **Claims 12 and 13** are substantially similar to claim 11, the claim upon which they depend and are thus, rejected for the same reasons.

34. **Claims 42 and 43** are product claims parallel to method claims 12 and 13, respectively, and are thus, rejected for the same reasons.

35. Claim 22 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Buist** in view of **Silverman** in further view of **Kitchen** and in further view of **Keith** (US Pub. No. 2002/0091617).

36. Regarding **claims 22 and 30**, neither **Buist**, **Silverman** nor **Kitchen** explicitly discloses receiving messages at the computerized trading system notifying the system of credit limits for use in providing bilateral credit for trades between third parties where no bilateral credit exists between the third parties.

However, **Keith** discloses general purpose computer or network of computers programmed in accordance with his trading processes and functions as a platform for allowing electronic liquidity finder (ELF) programs and **umpire programs** to interact [0041]. He further describes an order umpire program which is coupled to exchange through mirror ELF program that serves to pass messages between exchange and umpire. Order umpire program is also connected to external point for reporting trades as appropriate, to an external point not coupled via a mirror ELF [0051]. He further discloses service umpires which may perform credit checking, certification and/or clearing [0154]. Examiner interprets umpires, *service umpires* in particular, as analogous to Applicant's *third party* for tracking credit limits and providing bilateral credit between third parties. Also, message transmission between parties is inherent in **Keith's** process.

Therefore, it would have been obvious to a person having an ordinary skill in the art at the time of the instant invention to modify **Silverman's** disclosure to *use umpires in*

Art Unit: 3695

*notification of credit limits for use in providing bilateral credit for trades between third parties* as taught by **Keith** because umpires can aggregate and analyze data from a variety of sources and continuously produce the results of such analysis for a user – **Keith** [0152].

37. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Buist** in view of **Silverman** in further view of **Kitchen** and in further view of **Keith** in further view of **Wilton**.

38. Regarding **claim 31**, neither **Buist**, **Silverman**, **Kitchen** nor **Keith** explicitly discloses:

- the prime broker credit limit store stores credit limits from a plurality of participants and the matching engine matches orders between participants using credit from a chain of two or more prime brokers, a first of said having bilateral credit with the participant submitting one side of the matched order and a second of said chain having bilateral credit with the participant submitting the other side of the matched order.

However, **Wilton** teaches *credit entities which extend individual credit limits to each branch of a financial institution* [column 5 lines 13-29]. Here, Examiner interprets such *credit entities* as analogous to Applicant's **prime broker** and *individual credit limits* as being indicative of Applicant's *participants*. Examiner notes that while **Wilton** does not disclose a chain of *two* (emphasis added) or more brokers, it would have been obvious to do so.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to modify **Silverman's** disclosure to include *using credit entities to provide credit to participants lacking bilateral credit* as taught by **Wilton**

Art Unit: 3695

because they allow less credit-worthy trading entities to use the credit lines of more credit-worthy trading entities to execute desired transactions - **Wilton** [column 2 lines 57-64].

Thus, this claim is rejected for the same reasons as claims 9-11 and 39-41.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ed Baird whose telephone number is (571)270-3330. The examiner can normally be reached on Monday - Thursday 7:30 am - 5:00 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles R. Kyle can be reached on 571-272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ed Baird/  
Examiner, Art Unit 3695

/Narayanswamy Subramanian/  
Primary Examiner, Art Unit 3695